Subject Index

CS denotes centrespread illustration accompanying article

ageing *News* 278
AIDS *see also* virus HTLV, HIV
  paradox *News* 364
  single cell loss *News* 274
alginate structures 6
American Society for Microbiology, annual meeting 244
American Type Culture Collection *News* 202
anaerobes, drug activity 91
Animal Virus Research Institute, UK 240
Aphididae, symbiotic bacteria biology 117
atherosclerosis, viruses 50
ATPase, proton pumping from yeast 164
Australian National Animal Health Laboratory (ANAHL) *News* 191

bacteria
  aerobic photosynthetic 376
  barophilic ecology 205 (CS)
  evolution and DNA restriction 296
  Gram-negative, β-lactam resistance 334 (CS)
  Gram-negative envelopes *News* 362
  pathogenic anaerobes 88
  RNA phylogenies 172
  superficial protein 357
  symbiotic in Aphididae 117
  temperature tolerance *News* 275
  thermophiles from mesophiles *News* 277
bacterial space invaders *News* 41
bacteriological code 171
biodegradation, oil at sea 197
biosurfactants 145
biotechnology *News* 11
  carboxydotrophic bacteria 149
books reviewed
  Advanced Molecular Genetics by Pühler A and Timmis KN 255
  Biology of Sewage Treatment and Water Pollution Control by Mudrack K and Kunst S 255
  Microbiology by Pelczar Jr. MJ, Chan ECS and Krieg NR 254
  Petroleum Microbiology edited by Atlas RM 121
  Setting Genes to Work by Yanchinski S 120
Borrelia hermsii, quick change *News* 136

Campylobacter pyloridis in stomach 250
Candida sp., immunoglobulin cleavage 316
carboxydotrophic bacteria in biotechnology 149
cell immobilization methods 14 (CS)
cellulase
  efficiency limiting factors 84
  hydrolysis 86
cephalosporins, anaerobe activity 91
Chlamydia, koala's demise *News* 202
Chrysophyceae, photosynthetic phagotrophy 132
Clostridium acetobutylicum, gene transfer and cloning 19
coryneforms, JK and immunocompromised *News* 301
Cryptosporidium, human pathogen *News* 203
curdlan 5
cystic fibrosis and *Pseudomonas aeruginosa* 303

demyelinating disease, virus attenuation 68
dermatophytoses, immunology 154
DNA binding 116
DNA repair
  E. coli 76 (CS)
  inducible 76 (CS)
DNA restriction in bacterial evolution 296

editors, regional 280
Escherichia coli, heterologous gene expression 28
estuarine environment, enteric pathogens 324

fine chemicals from micro-algae 372
fungal genera
  name changes 168, 285
  taxonomy needs *News* 58
fusion protein cleavage 29

garlic and tuberculosis *News* 115
gene cloning 19
  classical genetics and eukaryotic *News* 204
gene expression
  heterologous in *E. coli* 28
  pH and control *News* 189
gene, one gene—many enzymes *News* 42
genetic code, deviations from 'universal' 36
gene transfer 19
glucose repression, yeast regulatory system 366
gradients, two-dimensional sloped *News* 139

heavy metals and microbes 330
herbicide resistance, microbes to plants 74

immunoglobulin, *Candida* cleavage 316
interferons
  cell function 229
  disease 281
interferon system, genetics and molecular biology 212
International Commission on the Taxonomy of Fungi 168, 285
International Council of Scientific Unions *News* 339
iridovirus frog virus 3 59
IUMS *News* 265

koala and chlamydia *News* 202

β-lactam resistance, Gram-negative 334 (CS)
latent virus 201
Legionnaires' disease, antibacterials 138
luteovirus taxonomy 309

malaria
  oil and *News* 114
  vaccine 292
marine ecosystems
  enteric pathogen fate 324
  oil biodegradation 197
meningitis, dog bites *News* 346
methanogens, protozoa symbiotic 100

micro-algae, chemicals from 372
Microbe '86
News 135, 223, 237
Microbial Ecology, Fourth International Symposium *News* 340
microbial genetics and toothpicks 74
mouse-hepatitis recombinant *News* 136
mycoses, pathogenesis of opportunistic 122
myxobacteria 268 (CS)

pertussis side-effects *News* 140
phosphorylation hosts *News* 251
photosynthetic bacteria 376
photosynthetic phagotrophy, Chrysophyceae 132
phthalate esters
enzyme, substrate specificity 95
microbial degradation 92
plasmids
isolation of large bacterial 252
multiresistant bacterial 53
Shigella sonnei infection control 216
poliovirus, antigenic structure 141
polypeptides, mammalian from yeast 23
polysaccharides, industrially useful 5
potato-starch, waste processing 179
prepro-alpha factor 24
proteinases, cell control 107
protein export, outside-in *News* 299
protein, freezing *News* 40
protein, *trans*-acting 59
proteolysis prevention *News* 12
protozoa and hydrogen-utilizing methanogenic symbiosis 100
Pseudomonas aerugir.osa and cystic fibrosis 302

recombinant vaccinia *News* 12
regulation, meiosis in yeasts 234
R factor *News* 200
ribosomal RNA phylogenies, vibrio-enteric group 172 (CS)
ribosome biosynthesis, molecular inventory control 342
rice stripe virus 347
mRNA splicing *News* 187
RNA virus, genome polarities 183

Saccharomyces cerevisiae
mating 45
proteinase 107 (CS)
Saccharomyces cerevisiae continued
cell control 107
Schizosaccharomyces pombe, meiosis regulation 234
scleroglucan 5
senescence, *Neurospora intermedia News* 137
Shigella sonnei, plasmids and control 216
slow diseases *News* 344
Staphylococcus aureus
multiresistant, plasmids 53
new guises *News* 188
Streptococcus milleri, escaping detection *News* 190
subtilisin 43
sugar cane, Fiji disease and pseudo-Fiji diseases 126
superoxide dismutase requirement *News* 247
surface protein gene 38

taxonomy, luteovirus 309
Third World Microbiology, education *News* 258
transformation, new moves *News* 43
transposons *News* 361

ultraviolet and viral skin infections 220

vaccine, malaria 292
virus *see also* individual viruses
atherosclerosis 50
attenuation and demyelinating disease 68
caulimoviruses, molecular biology 260
HIV *News* 274 *see also* HTLV
HTLV and nervous system *News* 73
HTLV types *News* 248
iridovirus frog virus 3 59
reovirus products 71
rice stripe 347
RNA, ambisense 183
skin infections and UV 220
slow *News* 344

yeast *see also* individual genera
glucose repression and regulation 366
mammalian polypeptides 23
methanol-utilizing *News* 9
pheromones 48
proton-pumping ATPase 164
sexual differentiation 45

zwischenferment *News* 114

Author Index

CS denotes centrespread illustration accompanying article

Arai T, biography 280
Arst Jr. HN,
coming up for air: a requirement for superoxide dismutase *News* 247
exploiting classical genetics to clone a eukaryotic regulatory gene *News* 204
for the want of zwischenferment *News* 114
pH and the control of gene expression *News* 189
preventing proteolysis *News* 12
Atwell RW, *see* Grimes DJ

Balkwill FR, Interferons: from molecular biology to man.
Part 1 Genetics and molecular biology of the interferon system 212
Part 2 Interferons and cell function 229
Part 3 Interferons and disease 281
Bertrand JC, Controlled marine ecosystems in the investigation of oil biodegradation at sea 197
Bickle TA, *see* Price C
Bishop DHL, Ambisense RNA viruses: positive and negative polarities combined in RNA virus genomes 183
Borowitzka MA, Micro-algae as sources of fine chemicals 372
Boutry M, *see* Goffeau A
Bratoeva MP, Microbiological methods and plasmid pattern analysis in epidemiological control of *Shigella sonnei* infections 216
Brayton PR, *see* Grimes DJ
Brown CM, editorial 200
Buchmeier MJ, *see* Koolen MJM

Cannon PF, International Commission on the Taxonomy of Fungi (ICTF)
Name changes in fungi of microbiological, industrial and medical importance Part 1 168
Part 2 285
Caron F, Deviations from the 'universal' genetic code 36
Carter BLA, Doel S, Gooday S, Piggott JR and Watson MEW, Secretion of mammalian polypeptides from yeast 23
Colby J, *see* Williams E
Cole ST and Nicolas MH, β-lactam resistance mechanisms in Gram-negative bacteria 334 (CS)
Collee JG, *see* Watt B
Colwell RR, *see* Grimes DJ
Colwell RR, *see* MacDonell MT
Cooper DG, Biosurfactants 145
Coppel RL, Prospects for a malaria vaccine 292
Curtin ME,
The AIDS paradox *News* 364
AIDS and the single cell *News* 274
The AIDS virus: the story so far *News* 248
Different hosts for phosphorylation *News* 251
DNA binding and normal science *News* 116
Herbicide resistance from microbes to plants *News* 74
Latent viruses exposed *News* 201
Mouse-hepatitis recombinants *News* 136
HTLV and the nervous system *News* 73
One gene—many enzymes *News* 42
Curtin ME continued
Oil on malaria-troubled waters *News* 114
Pertussis side-effects on centre stage *News* 140
Recombinant vaccinia shows its strength *News* 12

D'Arcy CJ, Current problems in the taxonomy of luteoviruses 309
Davies JE, review of *Setting Genes to Work* by Yanchinski S, 120
Deming JW, Ecological strategies of barophilic bacteria in the deep ocean 205 (CS)
Doel S, *see* Carter BLA
Duxbury T, Microbes and heavy metals: an ecological overview 330

Emtage JS, *see* Harris TJR
Entian K-D, Glucose repression: a complex regulatory system in yeast 366

Fabricant CG, Viruses: causal factors in atherosclerosis 50
Freer JH, review of *Microbiology* by Pelczar Jr. MJ, Chan ECS and Krieg NR 254

Gerhardt P,
IUMS *News* 14
IUMS *News* 265
Gillespie MT and Skurray RA, Plasmids in multiresistant *Staphylococcus aureus* 53
Glover SW
IUMS *News* 13
IUMS *News* 106
IUMS *News* 313
Third World Microbiology—Educational needs 238
Goffeau A and Boutry M, Three proton-pumping ATPases in yeast 164
Goodey AR, *see* Carter BLA
Govan JRW and Harris GS, *Pseudomonas aeruginosa* and cystic fibrosis: unusual bacterial adaptation and pathogenesis 302
Gottschal JC, *see* Nanninga HJ
Gowland PC and Hardman DJ, Methods for isolating large bacterial plasmids 252
Grimes DJ, Atwell RW, Brayton PR, Palmer LM, Rollins DM, Roszak DB, Singleton FL, Tamplin ML and Colwell PR, The fate of enteric pathogenic bacteria in estuarine and marine environments 324

Hamer G, review of *Biology of Sewage Treatment and Water Pollution Control* by Mudrack K and Kunst S 255
Harashima K, *see* Shiba T
Hardman DJ, *see* Gowland PC
Harris GS, *see* Govan JRW
Harris TJR and Emtage JS, Expression of heterologous genes in *E. coli* 28
Hashimoto H, *see* Ishikawa H
Hawksworth DL, Fungal genera in urgent need of taxonomic work *News* 58
Hirth L, The molecular biology of caulimoviruses 260
Howie S, *see* Norval M

Ishida Y and Kimura B, Photosynthetic phagotrophy of Chrysophyceae: evolutionary aspects 132
Ishikawa H and Hashimoto H, The molecular biology of symbiotic bacteria of Aphididae 117

Johnson SP, *see* Warner JR
Jones DT and Woods DR, Gene transfer, recombination and gene cloning in *Clostridium acetobutylicum* 19

Kimura B, *see* Ishida Y
Koolen MJM and Buchmeier MJ, Experimental models of virus attenuation and demyelinating disease 68
Koval SF and Murray RGE, The superficial protein arrays on bacteria 357
Kurane R, Microbial degradation of phthalate esters 92

Last GA, *see* MacDonell MT

MacDonell MT, Swartz DG, Ortiz-Conde BA, Last GA and Colwell RR, Ribosomal RNA phylogenies for the vibrio-enteric group of eubacteria 172 (CS)
Mahy BWJ, The Animal Virus Research Institute, Pirbright, UK 240
Mahy BWJ, *News* 237
Maingay J, *see* Norval M
Minor PD, Antigenic structure of poliovirus 141
Moseley BEB
A freezing protein *News* 40
Turning mesophiles into thermophiles *News* 277
Two-dimensional gradients for microbes to slope up *News* 139
Moses V, review of *Petroleum Microbiology* edited by Atlas RM 121
Murray RGE, Follow the bacteriological code *News* 171
Murray RGE, *see* Koval SF

Nanninga HJ and Gottschal JC, Microbial problems with waste from potato-starch processing 179
Nicolas MH, *see* Cole ST
Norval M, Howie S, Rose J and Maingay J, The effect of UV-irradiation on viral infections of the skin 220

Ortiz-Conde BA, *see* MacDonell MT

Paclt J, Fiji and pseudo-Fiji diseases of sugar cane 126
Palmer LM, *see* Grimes DJ
Piggott JR, *see* Carter BLA
Pramer D, The Fourth International Symposium on Microbial Ecology *News* 340
Price C and Bickle TA, A possible role for DNA restriction in bacterial evolution 296
Pugsley AP
An age-old old age problem *News* 278
All wrapped up *News* 362
Another quick change artist *News* 136
Biography 280
BLA BLA and TET à TET *News* 200
Capital microbiology—The American Society for Microbiology (ASM) Annual Meeting in Washington DC, 1986 244
Microbial geneticists do it with toothpicks *News* 74
Microbiologists and biotechnology *News* 11
New moves in transformation *News* 43
Quicker progress on slow diseases *News* 344
Return of the bacterial space invaders *News* 41
A short trip to senescence for *Neurospora intermedia News* 137
Some like it hot *News* 275
Subcellular organelle biogenesis: turning protein export outside in *News* 299
Tailor-made *News* 187
Transposons are not hopping mad *News* 361

Reichenbach H, The myxobacteria: common organisms with uncommon behaviour 268 (CS)
Roberts TA *News* 238
Rollins DM, *see* Grimes DJ
Ross J, *see* Norval M
Roszak DB, *see* Grimes DJ
Rüchel R, Cleavage of immunoglobulins by pathogenic yeasts of the genus *Candida* 316

Saddler JN, Factors limiting the efficiency of cellulase enzymes 84
Schaechter M, biography 280
Sedgewick SG, Inducible DNA repair in microbes 76 (CS)
Shiba T and Harashima K, Aerobic photosynthetic bacteria 376
Singleton FL, *see* Grimes DJ
Skurray RA, *see* Gillespie MT
Smith JMB, The pathogenesis of opportunistic mycoses in man 122
Stevenson I, Chlamydia and the demise of the koala *News* 202
Pathogen containment—Australian style *News* 191
Stumm CK and Zwart KB, Symbiosis of protozoa with hydrogen-utilizing methanogens 100
Sutherland IW, Industrially useful microbial polysaccharides 5
Svejgaard E, Recent trends in the immunology of dermatophytosis 154
Swartz DG, *see* MacDonell MT

Tamplin ML, *see* Grimes DJ
Thompson JP, *see* Willis DB
Toriyama S, Rice stripe virus: prototype of a new group of viruses that replicate in plants and insects 347

Voll MJ, review of *Advanced Molecular Genetics* edited by Pelczar A and Timmis KN 253

Warner JR and Johnson SP, Molecular inventory control in ribosome biosynthesis 341
Watson MEW, *see* Carter BLA
Watt B
Campylobacter pyloridis—a stomach pathogen *News* 250
Cryptosporidium—an important human enteric pathogen *News* 203
Dog bites can cause meningitis *News* 346
Garlic: an alternative treatment for tuberculosis *News* 115
JK coryneforms and the immunocompromised patient *News* 301
New antibacterials for the treatment of Legionnaires' disease *News* 138
An old enemy in a new guise *News* 188
Streptococcus milleri—escaping detection as a pathogen *News* 190
Watt B and Collee JG, Pathogenic anaerobic bacteria of man 88
Whelan WJ, ICSU and 2001 *News* 339
Williams E and Colby J, Biotechnological applications of carboxydotrophic bacteria 149
Willis DB and Thompson JP, The iridovirus frog virus 3: a model for *trans*-acting proteins 59
Wolf DH, Cellular control in the eukaryotic cell through action of proteinases: the yeast *Saccharomyces cerevisiae*

Wolf DH continued:
(*Saccharomyces cerevisiae*)
as a model organism 107 (CS)
Woods DR, *see* Jones DT
Woodward JR, The up and up of methanol-utilizing yeasts *News* 9
Yamamoto M, Regulation of meiosis in *Schizosaccharomyces pombe* 234
Yanagishima N, Sexual differentiation and interaction in yeasts 45
Zwart KB, *see* Stumm CK